- (2) Paper bags 5M2: To prevent the entry of moisture, a bag of four plies or more must be made waterproof by the use of either a water-resistant ply as one of the two outermost plies or a water-resistant barrier made of a suitable protective material between the two outermost plies. A 5M2 bag of three plies must be made waterproof by the use of a water-resistant ply as the outermost ply. When there is danger of the lading reacting with moisture, or when it is packed damp, a waterproof ply or barrier, such as double-tarred kraft paper, plastics-coated kraft paper, plastics film bonded to the inner surface of the bag, or one or more inner plastics liners, must also be placed next to the substance. Seams and closures must be waterproof.
- (3) Maximum net mass: 50 kg (110 pounds).
- (4) UN5M1 and UN5M2 multi wall paper bags that have paper wall basis weights that vary by not more than plus or minus 5% from the nominal basis weight reported in the initial design qualification test report.

[Amdt. 178–97, 55 FR 52717, Dec. 21, 1990, as amended at 56 FR 66285, Dec. 20, 1991; Amdt. 178–106, 59 FR 67521, Dec. 29, 1994; 79 FR 15046, Mar. 18, 2014]

## § 178.522 Standards for composite packagings with inner plastic receptacles.

- (a) The following are the identification codes for composite packagings with inner plastic receptacles:
- (1) 6HA1 for a plastic receptacle within a protective steel drum;
- (2) 6HA2 for a plastic receptacle within a protective steel crate or box;
- (3) 6HB1 for a plastic receptacle within a protective aluminum drum.
- (4) 6HB2 for a plastic receptacle within a protective aluminum crate or box.
- (5) 6HC for a plastic receptacle within a protective wooden box.
- (6) 6HD1 for a plastic receptacle within a protective plywood drum:
- (7) 6HD2 for a plastic receptacle within a protective plywood box;
- (8) 6HG1 for a plastic receptacle within a protective fiber drum;
- (9) 6HG2 for a plastic receptacle within a protective fiberboard box;
- (10) 6HH1 for a plastic receptacle within a protective plastic drum; and

- (11) 6HH2 for a plastic receptacle within a protective plastic box.
- (b) Construction requirements for composite packagings with inner receptacles of plastic are as follows:
- (1) Inner receptacles must be constructed under the applicable construction requirements prescribed in §178.509(b) (1) through (7) of this subpart.
- (2) The inner plastic receptacle must fit snugly inside the outer packaging, which must be free of any projections which may abrade the plastic material.
- (3) Outer packagings must be constructed as follows:
- (i) 6HA1 or 6HB1: Protective packaging must conform to the requirements for steel drums in §178.504(b) of this subpart, or aluminum drums in §178.505(b) of this subpart.
- (ii) 6HA2 or 6HB2: Protective packagings with steel or aluminum crate must conform to the requirements for steel or aluminum boxes found in \$178.512(b) of this subpart.
- (iii) 6HC protective packaging must conform to the requirements for wooden boxes in §178.513(b) of this subpart.
- (iv) 6HD1: Protective packaging must conform to the requirements for plywood drums, in §178.507(b) of this subpart.
- (v) 6HD2: Protective packaging must conform to the requirements of plywood boxes, in §178.514(b) of this subpart.
- (vi) 6HG1: Protective packaging must conform to the requirements for fiber drums, in §178.508(b) of this subpart.
- (vii) 6HG2: protective packaging must conform to the requirements for fiberboard boxes, in §178.516(b) of this subpart.
- (viii) 6HH1: Protective packaging must conform to the requirements for plastic drums, in §178.509(b).
- (ix) 6HH2: Protective packaging must conform to the requirements for plastic boxes, in §178.517(b).
- (4) Maximum capacity of inner receptacles is as follows: 6HA1, 6HB1, 6HD1, 6HG1, 6HH1—250 L (66 gallons); 6HA2, 6HB2, 6HC, 6HD2, 6HG2, 6HH2—60 L (16 gallons).
- (5) Maximum net mass is as follows: 6HA1, 6HB1, 6HD1, 6HG1, 6HH1—400kg

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(882 pounds); 6HB2, 6HC, 6HD2, 6HG2, 6HH2—75 kg (165 pounds).

[Amdt. 178–97, 55 FR 52717, Dec. 21, 1990, as amended by Amdt. 178–106, 59 FR 67521, Dec. 29, 1994]

## § 178.523 Standards for composite packagings with inner glass, porcelain, or stoneware receptacles.

- (a) The following are identification codes for composite packagings with inner receptacles of glass, porcelain, or stoneware:
- (1) 6PA1 for glass, porcelain, or stoneware receptacles within a protective steel drum:
- (2) 6PA2 for glass, porcelain, or stoneware receptacles within a protective steel crate or box:
- (3) 6PB1 for glass, porcelain, or stoneware receptacles within a protective aluminum drum;
- (4) 6PB2 for glass, porcelain, or stoneware receptacles within a protective aluminum crate or box:
- (5) 6PC for glass, porcelain, or stoneware receptacles within a protective wooden box;
- (6) 6PD1 for glass, porcelain, or stoneware receptacles within a protective plywood drum;
- (7) 6PD2 for glass, porcelain, or stoneware receptacles within a protective wickerwork hamper;
- (8) 6PG1 for glass, porcelain, or stoneware receptacles within a protective fiber drum:
- (9) 6PG2 for glass, porcelain, or stoneware receptacles within a protective fiberboard box:
- (10) 6PH1 for glass, porcelain, or stoneware receptacles within a protective expanded plastic packaging; and
- (11) 6PH2 for glass, porcelain, or stoneware receptacles within a protective solid plastic packaging.
- (b) Construction requirements for composite packagings with inner receptacles of glass, porcelain, or stoneware are as follows:
- (1) Inner receptacles must conform to the following requirements:
- (i) Receptacles must be of suitable form (cylindrical or pear-shaped), be made of good quality materials free from any defect that could impair their strength, and be firmly secured in the outer packaging.

- (ii) Any part of a closure likely to come into contact with the contents of the receptacle must be resistant to those contents. Closures must be fitted so as to be leakproof and secured to prevent any loosening during transportation. Vented closures must conform to §173.24(f) of this subchapter.
- (2) Protective packagings must conform to the following requirements:
- (i) For receptacles with protective steel drum 6PAl, the drum must comply with §178.504(b) of this subpart. However, the removable lid required for this type of packaging may be in the form of a cap.
- (ii) For receptacles with protective packaging of steel crate or steel box 6PA2, the protective packaging must conform to the following:
  - (A) Section 178.512(b) of this subpart.
- (B) In the case of cylindrical receptacles, the protective packaging must, when upright, rise above the receptacle and its closure; and
- (C) If the protective crate surrounds a pear-shaped receptacle and is of matching shape, the protective packaging must be fitted with a protective cover (cap).
- (iii) For receptacles with protective aluminum drum 6PB1, the requirements of §178.505(b) of this subpart apply to the protective packaging.
- (iv) For receptacles with protective aluminum box or crate 6PB2, the requirements of §178.512(b) of this subpart apply to the protective packaging.
- (v) For receptacles with protective wooden box 6PC, the requirements of \$178.513(b) of this subpart apply to the protective packaging.
- (vi) For receptacles with protective plywood drum 6PD1, the requirements of §178.507(b) of this subpart apply to the protective packaging.
- (vii) For receptacles with protective wickerwork hamper 6PD2, the wickerwork hamper must be properly made with material of good quality. The hamper must be fitted with a protective cover (cap) so as to prevent damage to the receptacle.
- (viii) For receptacles with protective fiber drum 6PG1, the drum must conform to the requirements of §178.508(b) of this subpart.
- (ix) For receptacles with protective fiberboard box 6PG2, the requirements